

AMENDMENTS TO THE CLAIMS

Pursuant to 37 CFR 1.121, presented below are the pending claims having status identifiers.

Claims 1, 9 and 17 are herewith amended. Claims 23-25 are newly added.

We claim:

1. (Currently amended) A spindle motor comprising:

a rotatable component defining a bearing gap and relatively rotatable with a stationary component;

a base plate affixed to the stationary component;

a stator, affixed to the stationary component, for generating an electromagnetic force that interacts with a magnet affixed to the rotatable component and drives the rotatable component, wherein the stator and the base plate define a separation there between, and wherein the stator is situated radially outside the magnet;

a motor seal situated radially outside the magnet and positioned axially above the stator;

and

a bonding substance, formed substantially about the stator, substantially filling the separation and uniting the base plate, a the motor seal and the stator, wherein the base plate axial thickness is minimized adjacent to the separation.

2. (Canceled)

3. (Original) The spindle motor as in claim 1, wherein the bonding substance comprises a thermally conductive epoxy having a high bonding strength.

4. (Original) The spindle motor as in claim 3, wherein the thermally conductive epoxy comprises one of TC-2707 and DP-190.

5. (Canceled)

6. (Previously presented) The spindle motor as in claim 1, wherein the axial thickness of at least a portion of the base plate is in the range of 0.1 mm. to 0.3 mm.

7. (Original) The spindle motor as in claim 1, wherein a portion of the base plate adjacent to the separation defines an opening that is substantially filled with the bonding substance, and the bonding substance forms a contiguous base plate.

8. (Previously presented) The spindle motor as in claim 1, wherein a portion of the stator is positioned below an adjacent surface of the base plate, wherein the base plate has a varied axial thickness.

9. (Currently amended) A spindle motor for incorporation into a disc drive storage system comprising:

a rotatable component defining a bearing gap and relatively rotatable with a stationary component;

a base plate affixed to the stationary component;

a data storage disc attached to the rotatable component;

a stator, affixed to the stationary component, for generating an electromagnetic force that interacts with a magnet affixed to the rotatable component and drives the rotatable component, wherein the stator and the base plate define a separation there between, and wherein the stator is situated radially outside the magnet;

a motor seal situated radially outside the magnet and positioned axially above the stator;

and

a bonding substance, formed substantially about the stator, substantially filling the separation and uniting the base plate, a the motor seal and the stator, wherein the base plate axial thickness is minimized adjacent to the separation.

10. (Canceled)

11. (Original) The spindle motor as in claim 9, wherein the bonding substance comprises a thermally conductive epoxy having a high bonding strength.

12. (Original) The spindle motor as in claim 11, wherein the thermally conductive epoxy comprises one of TC-2707 and DP-190.

13. (Canceled)

14. (Previously presented) The spindle motor as in claim 9, wherein the axial thickness of at least a portion of the base plate is in the range of 0.1 mm. to 0.3 mm.

15. (Original) The spindle motor as in claim 9, wherein a portion of the base plate adjacent to the separation defines an opening that is substantially filled with the bonding substance, and the bonding substance forms a contiguous base plate.

16. (Previously presented) The spindle motor as in claim 9, wherein a portion of the stator is positioned below an adjacent surface of the base plate, wherein the base plate has a varied axial thickness.

17. (Currently amended) A method comprising:

defining a bearing gap between a rotatable component and a stationary component;

affixing a base plate to the stationary component;

affixing a stator to the stationary component, for generating an electromagnetic force that interacts with a magnet affixed to the rotatable component and drives the rotatable component
wherein the stator is situated radially outside the magnet;

positioning a motor seal radially outside the magnet and axially above the stator;

forming a bonding substance substantially about the stator;

filling substantially with the bonding substance a separation defined between the stator and the base plate;

uniting the base plate, a the motor seal and the stator; and

minimizing the base plate axial thickness adjacent to the separation.

18. (Canceled)

19. (Original) The method as in claim 17, further comprising utilizing a thermally conductive epoxy having a high bonding strength for the bonding substance.
20. (Previously presented) The method as in claim 17, further comprising positioning a portion of the stator below an adjacent surface of the base plate, wherein the base plate has a varied axial thickness.
21. (Previously presented) The method as in claim 17, wherein at least a portion of the base plate is formed having an axial thickness in the range of 0.1 mm. to 0.3 mm.
22. (Original) The method as in claim 17, further comprising forming an opening through the portion of the base plate adjacent to the separation, substantially filling the opening with the bonding substance, and forming a contiguous base plate with the bonding substance.
23. (New) The spindle motor as in claim 1, wherein a portion of the base plate adjacent to the separation defines an opening that is substantially filled with the bonding substance, the bonding substance forming a contiguous base plate, and wherein a portion of the stator is positioned below an adjacent surface of the base plate, the base plate having a varied axial thickness.
24. (New) The spindle motor as in claim 9, wherein a portion of the base plate adjacent to the separation defines an opening that is substantially filled with the bonding substance, the bonding substance forming a contiguous base plate, and wherein a portion of the stator is positioned below an adjacent surface of the base plate, the base plate having a varied axial thickness.
25. (New) The method as in claim 17, further comprising forming an opening through the portion of the base plate adjacent to the separation, positioning a portion of the stator below an adjacent surface of the base plate, wherein the base plate has a varied axial thickness, substantially filling the opening with the bonding substance, and forming a contiguous base plate with the bonding substance.